The relationships between phonetic compliance and oral production skills in English for French L1 EFL learners

Kathy Huet^{*}, Véronique Delvaux^{*+}, Myriam Piccaluga^{*}, Bernard Harmegnies^{*} ^{*}Institut de Recherche en Sciences et Technologies du Langage, UMONS, ⁺FNRS, Belgium

Phonetic compliance is defined as the intrinsic speaker-specific ability to appropriately mobilize perception and production processes in order to produce unfamiliar speech sounds. As such, it is a necessary but not sufficient condition for the acquisition of the phonetics and phonology of a foreign language (Delvaux *et al.*, 2014). This paper investigates the relationships between phonetic compliance and oral production skills in English by EFL learners. If the former is one of the determinants of the latter, one may hypothesize a positive correlation between associated indicators in the performances of English L2 learners.

Thirty French L1 English L2 learners, whose language level in English was assessed as B2, participated in the experiment. Task 1 consisted of a reading of "The north wind and the sun". All oral reading productions were assessed twice by 3 experienced EFL teachers using a 10-point Likert scale to answer 5 questions (on overall performance in oral production and specific oral skills regarding: prosody, schwa productions, overal phonetic accuracy and stress realization). Based on these assessments, 12 participants (the 6 best and the 6 poorest) were selected to perform Task 2. Task 2 consisted in 10 repetitions of the French oral vowels, as well as 6 repetitions of 94 synthesized vowel-like stimuli spanning the whole vocalic space. Formant values manually measured in the middle of the repetitions were used to compute three indices of phonetic compliance (following Delvaux *et al.*, 2014).

Results showed that: (i) task 1 exhibited a good discriminative power between L2 learners and resulted in assessments which showed excellent intra-judge and good inter-judge correlations; (ii) task 2 revealed meaningful individual profiles in phonetic compliance based on both the consistency and the complementarity of the information provided by the three indices; (iii) the correlations between performances in tasks 1 and 2 were poor. We will discuss at the conference two (possibly concomitant) interpretations for this latter result: either oral skills in the dominant foreign language are only loosely correlated with the overall ability of the L2 learners to reproduce unfamiliar speech sounds, or our indicators of oral skills (and/or phonetic compliance) need refinement to allow for such correlations to emerge.

References

Delvaux, V., Huet, K., Piccaluga, M., & Harmegnies, B. (2014). Phonetic compliance: a proof-of-concept study. *Front. Psychol.*, *5*, 1375. doi: 10.3389/fpsyg.2014.01375

Acknowledgements: The authors thank David Van Malder for his help with data collection.